

4. On the Genus *Myosorex*, with Description of a new Species from the Rio del Rey (Cameroons) District. By G. E. DOBSON, M.A., F.R.S.

[Received November 8, 1887.]

The genus *Myosorex*¹ was founded in 1837 by Dr. J. E. Gray for the reception of a small species of white-toothed Shrew, *Sorex varius*, Smuts, from the Cape Colony; which was then at once distinguished from all other known species of white-toothed Shrews by the short, subequal, and rather coarse hairs covering the tail. Trivial as this character may appear, and as such it has evidently been hitherto regarded by systematic zoologists, it is; however, the only one out of the many enumerated in the original definition of this genus (see footnote below) which is really characteristic of it taken in connection with the white colour of the teeth.

MYOSOREX.

Myosorex, Gray, Proc. Zool. Soc. 1837, p. 124.

General characters those of *Crocidura*, but distinguished by the absence of long hairs on the tail, which is clothed with short fur of equal or subequal length, by the shortness of the third upper incisor, and by the absence of a distinct cloaca, the generative organs and the alimentary canal opening on the surface close together by distinct orifices.

Dentition: $\frac{\text{Inc. } 3-3, \text{ pm. } 3-3, \text{ m. } 3-3}{\text{Mand. } 6-6 \text{ or } 7-7} = 30 \text{ or } 32 \text{ teeth.}$

Range. Africa south of the Sahara Desert.

1. MYOSOREX VARIUS.

Sorex varius, Smuts, Mamm. Capens. 1832, p. 8.

Myosorex varius, Gray, Proc. Zool. Soc. 1837, p. 124.

This, the largest species of the genus, is somewhat larger than *Crocidura aranea*. The body is clothed with dense fur, pale reddish grey on the surface, passing gradually into ashy beneath, the basal four-fifths of the hairs bluish; tail clothed thinly with equal-sized reddish-grey hairs forming a small pencil at the tip. The lateral gland is well developed in males, rudimentary or absent in females, and situated close behind the arm.

The teeth are very peculiar and characteristic. The upper incisors and premolars are provided with prominent basal processes, the third

¹ "MYOSOREX, Gray. Head elongate, ears hid under the soft fur; tail elongate, slender, covered with short, rigid, close-pressed hairs, when old quadrangular; feet and toes not ciliated; teeth white; cutting-teeth $\frac{8}{6}$, two upper central unequally bifid, the second lateral moderate, the third very small, rudimentary, the fourth small but larger than the third; front lower cutting-teeth elongate, with an entire sharp upper edge; second and third lateral teeth small, simple, crowded on the base of the front ones."—Gray, P. Z. S. 1837, p. 124.

incisor is much smaller than the anterior maxillary tooth, and the penultimate premolar is minute, quite invisible from without, and placed in the small angle between the adjoining teeth. The most remarkable peculiarity, however, is found in the mandible, where (as first pointed out by me in the *Journ. Anat. Phys.* xx. p. 359, 1886) a minute tooth exists on each side between the second and third teeth, so that the number of mandibular teeth is fourteen instead of twelve, as we find in all other known species of *Soricidæ*.

(For measurements see table p. 578.)

Hab. South Africa (Namaqua-Land, Cape Colony, Natal).

2. MYOSOREX MORIO.

Crociodura morio, Gray, Proc. Zool. Soc. 1862, p. 180¹.

Smaller than *Myosorex varius* and about the size of a large specimen of *Crociodura aranea*, but distinguished at once, not only from all species of the genus, but also from all known species of *Soricidæ*, by the comparatively enormous size of the lateral gland², which, in the male, occupies a circular space having a diameter of 9 millimetres, larger than the space occupied by the same gland in the Great Indian Musk-Shrew (*Crociodura cærulescens*), and by the nakedness of the sides and abdomen below and behind these glands. Ears moderate, clothed with very short hairs; manus and pes covered with short hairs. Fur dark reddish brown above, and slightly paler beneath.

The first upper incisor is long, the anterior cusp much longer than the posterior, which, however, is well developed; the third incisor is shorter than the anterior maxillary tooth; but the greatest peculiarity exists in the comparatively large size of the penultimate premolar, which, viewed externally, though not half the size of the anterior maxillary tooth, stands quite in the tooth-row, and its cusp equals or slightly exceeds (in specimens in which it is not worn) the anterior basal cusp of the last premolar. The last upper molar is like that of *Myosorex varius*, larger than in the species of the genus *Crociodura*, its posterior part being as well developed as the corresponding tooth in that species. The first mandibular tooth has two very distinct notches as in *Myosorex varius*; the second tooth is unicuspidate and has this peculiarity that, instead of being placed almost altogether on the first tooth, its base very slightly overlies it;

¹ "Uniform rather brownish black, rather paler and browner beneath. Teeth white. Feet very slender, weak. Tail nearly as long as the body and head, very slender, annulated, covered with very short closely adpressed hair.

"Length of body and head, dry, 2½ inches; tail, dry, 2 inches."—Gray, *l. c.*

It may be seen that it would be impossible from this description alone to identify not merely the species but even the genus, nevertheless, as the type, a skin, corresponds in all respects to the well-preserved specimen in alcohol from which I have taken my description of this species, I retain Dr. Gray's specific title.

² Having shown the glands in this species to Mr. G. A. Boulenger, he remarked that an integumentary gland occupies a corresponding position on each side of the body in several species of the genus *Paludicola* (Batrachia); of very large size in some species (*P. bufonium*, Bell, e. g.), in others of the same genus it is so small as to render it very difficult to say whether a gland exists or not.

the third tooth has not the prominent anterior and posterior cusps so well developed in *M. varius*. There is no minute tooth between the second and third mandibular teeth.

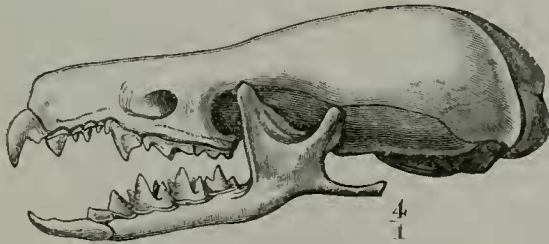
(For measurements see table p. 578.)

Hab. Cameroon District, West Africa.

The type, a skin with skull, was collected by Captain R. Burton, and is preserved in the British Museum (Natural History); a second specimen, a well-preserved example of an adult male, in alcohol, has formed the basis of the above description, and has furnished the measurements given in the table at p. 578.

3. MYOSOREX JOHNSTONI, n. sp.

Very slightly larger than *Crocidura etrusca*, and therefore almost the smallest mammal known. The tail is even shorter than in that species, shorter than the body without the head, and clothed characteristically with short, even-sized hairs. The ears are moderate and clothed with very short hairs. Both the manus and pes are moderate in size, with short claws, and covered with thinly-spread short fur. As in *M. morio* there is a very large lateral gland in the male, but as no female specimen has yet been obtained, its condition in that sex is unknown. So far as can be ascertained from the inspection of a single male specimen preserved in alcohol the colour of the fur is dark brown above, slightly paler beneath.



Skull of *Myosorex johnstoni*.

Although the animal is but slightly larger than *C. etrusca* in general measurements, yet its skull is considerably larger in all dimensions. The teeth agree with those of the other two species in the reduced size of the third upper incisor (see woodcut above), but correspond most closely with those of *M. morio* from the same part of Africa in their general form and in the position of the penultimate premolar, which stands in the tooth-row and is not minute as in *M. varius*. The anterior mandibular tooth has two notches, as in the other species, for the posterior basal cusp of the first upper incisor and for the cusp of the second incisor. There is no rudimentary tooth (such as I have described in *M. varius*) between the second and third mandibular teeth.

(For measurements see table p. 578.)

The type, a full-grown male specimen, well preserved in alcohol, was obtained by H. H. Johnston, Esq., H.M. Vice-Consul for the

Cameroons, and I have much pleasure in connecting with its specific title the name of that distinguished traveller.

Hab. Cameroon District, West Africa (Rio del Rey).

The following table exhibits the measurements, in millimetres, of adult male specimens (preserved in alcohol) of the three above described species; in the first column are those of *Myosorex varius*, in the second *M. morio*, and in the third *M. johnstoni*.

	1.	2.	3.
Tip of nose to vent	76	64	39
Vent to tip of tail	41	55	25
Eye to tip of nostril	12½	12	9
Elbow to end of middle digit (without claw)	21	18½	11½
Manus (without claw).....	9	8	5
Pes (without claw).....	13½	13½	9
Skull, occipital crest to front edge of premaxilla.....	19	16½	13
Skull, foramen magnum to front edge of premaxilla	19	16½	12
Greatest width of the skull	11	9½	7
Length of upper tooth-row	9½	8	6½
Distance between tips of principal cusps of first upper incisor and last premolar	4½	4½	3½
Length of mandible from condyle to tip of first tooth ...	14½	13	9½

A synopsis of the species may be given as follows, from the descriptions above:—

A. Mandibular teeth 7—7.

a. Penultimate upper premolar minute, internal;
elbow to end of middle digit 21 mm..... 1. *M. varius*.

B. Mandibular teeth 6—6.

b. Penultimate upper premolar not minute, standing
in the tooth-row.

b'. Elbow to end of middle digit 18½ mm. 2. *M. morio*.

c'. Elbow to end of middle digit 11½ mm..... 3. *M. johnstoni*.

5. On a new Species of *Hyla* from Port Hamilton, Corea, based on an example living in the Society's Gardens. By G. A. BOULENGER, F.Z.S.

[Received July 2, 1887.]

(Plate LI.)

Two Tree-Frogs of the genus *Hyla*, obtained by Mr. George Stephen, of H.M.S. 'Champion,' at Port Hamilton, a small island between the Corean Peninsula and Japan, have been presented by him to the Society. They prove of great interest, as one belongs to a little-known race of *Hyla arborea*, viz. the var. *japonica* (Plate LI. fig. 2); and the other to a new species, which I propose to call, in honour of its discoverer.